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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,851	01/11/2002	Brigitte Spei	H 4051 PCT/US	8297
423	7590	02/05/2004	EXAMINER	
HENKEL CORPORATION THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. GULPH MILLS, PA 19406			HRUSKOCI, PETER A	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,851

Applicant(s)

SPEI ET AL.

Examiner

Peter A. Hruskoci

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-51 is/are pending in the application.
- 4a) Of the above claim(s) 33-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Newly submitted claims 43-51 are directed to a composition which would have been included in the Group II claims 33-42, that were non-elected in the prior Office action dated 9-15-03, in accordance with PCT Rule 13.1 and PCT Rule 13.2.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 33-51 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-18, 23-25, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. 4,656,059. Mizuno et al. disclose (see col. 2 line 40 through col. 5 line 65) a process for treating circulating water in a painting booth substantially as claimed. The claims differ from Mizuno et al. by reciting the addition of an agent consisting essentially of a specific concentration of dispersant selected from a specific group of nonionic and anionic surfactants. It is submitted that the nonionic and anionic surfactants and amounts disclosed in Mizuno et al. are considered patentably indistinguishable from the recited agent or surfactants and concentration. It would have been obvious to one skilled in the art to modify the process of Mizuno et al. by addition of the recited dispersant in the recited concentration, to aid in dispersing paint in the water. The specific surfactant and concentration utilized, and the specific

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mean particle size achieved, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific water treated and results desired, absent a sufficient showing of unexpected results.

Claim 19 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. 4,656,059 as above, and further in view of Gerigk et al. 5,490,939. The claims differ from Mizuno et al. by reciting an additional step of removing the paint particles from the circulating water by membrane filtration. Gerigk et al. disclose (see col. 5 line 26 through col. 6 line 53) that it is known in the art to utilize membrane filtration to aid in removing coating components from booth water and overspray. It would have been obvious to one skilled in the art to modify the process of Mizuno et al. by utilizing membrane filtration in view of the teachings of Gerigk et al., to aid in removing paint particles from the water.

Claims 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. 4,656,059 as above, and further in view of Zarges et al. 6,187,195. The claims differ from Mizuno et al. by reciting the addition of polyaspartic acid to the circulating water. Zarges et al. disclose (see col. 3 line 56 through col. 6 line 62) that it is known in the art to add polyaspartic acid and surfactants to industrial wastewater systems to aid in inhibiting scale formation. It would have been obvious to one skilled in the art to modify the process of Mizuno et al. by addition of polyaspartic acid in view of the teachings of Zarges et al., to aid in inhibiting scale formation in the water.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. 4,656,059 and Zarges et al. 6,187,195 as above, and further in view of Gerigk et al. 5,490,939. The claim differs from the references as applied above by reciting an additional step of removing

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the paint particles from the circulating water by membrane filtration. Gerigk et al. disclose (see col. 5 line 26 through col. 6 line 53) that it is known in the art to utilize membrane filtration to aid in removing coating components from booth water and overspray. It would have been obvious to one skilled in the art to modify the references as applied above by utilizing membrane filtration in view of the teachings of Gerigk et al., to aid in removing paint particles from the water.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. 4,656,059 and Zarges et al. 6,187,195 as above, and further in view of Mizuno et al. 5,378,389. The claim differs from the references as applied above by reciting the addition of a dispersant selected from a group of specific homopolymers and copolymers. Mizuno et al. (389) disclose (see col. 3 line 53 through col. 6 line 23) that it is known in the art to add the recited dispersants to aid in reducing tackiness of paint in spray booth water. It would have been obvious to one skilled in the art to modify the references as applied above by addition of the recited dispersant in view of the teachings of Mizuno et al. (389) to aid in reducing the tackiness of paint particles in the water.

Claim 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. 4,656,059 as above, and further in view of Miknevich 5,730,881. The claims differ from the Mizuno et al. as applied above by reciting the addition of a dispersant selected from a group of specific oligomeric and polymeric inorganic phosphates, and organic carboxylic acids. Miknevich disclose (see col. 5 line 1 through col. 6 line 45) that it is known in the art to add the recited phosphates to aid providing corrosion protection, and recited carboxylic acids to aid in chelating hardness in paint spray booth water systems. It would have been obvious to one skilled

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in the art to modify the process of Mizuno et al. by addition of the recited dispersant in view of the teachings of Miknevich, to aid in reducing corrosion and in chelating hardness in the painting booth system.

Applicants argue that Mizuno et al. depends on the presence of melamine-aldehyde colloid solution and applicants have discovered that excellent results can be achieved using dispersants and pH adjusters by themselves. It is noted the term "comprising" as recited in claim 15 fails to exclude the presence of or addition of additional agents such as a melamine-aldehyde colloid solution to the instant process. Furthermore, applicants have not supplied sufficient factual evidence to support the above argument.

Applicants argues that Zarges et al. is limited to adding polyaspartic acid to inhibit scale formation on membrane filters, and nothing in Zarges suggests that these teachings can be combined with Mizuno. It is submitted that the deposit formation inhibited in Zarges is not limited to inorganic salts but includes deposit formation by organic substances. It is further submitted that the industrial wastewaters treated in Zarges would appear to include wastewaters containing paint particles. Furthermore, it is noted instant claims 19 and 21 are drawn to the use of membrane filtration.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period


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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Peter A. Hruskoci
Primary Examiner
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1/31/04